

Application No. 10/653,996

**REMARKS**

This Amendment is in response to the Office Action mailed on August 30, 2005.

Claims 11-15 and 20-21 are allowed over the prior of record, and claims 3, 7, 18-19 and 23-26 are allowable if rewritten in independent form including all of the limitations of the base claim and intervening claims. The patentability of these claims is noted with appreciation. (Claim 20 is left off of the Office Action Summary sheet. Correction is respectfully requested.)

Claims 1-2, 4-6, 8-10 and 22 stand rejected under 35 U.S.C § 102(b) as being anticipated by U.S. Patent No. 5,113,070 to Smith, and claims 16-17 are rejected under 35 U.S.C § 102(b) as being anticipated by U.S. Patent No. 6,820,489 B2 to Fernald *et al.* Applicants respectfully traverse these rejections.

Independent claim 1 recites among other things "a pressure sensor co-located with a temperature sensor." On the other hand, the Smith reference does not disclose a temperature sensor. In other words, the sensor in Smith cannot measure temperature. The Examiner cites to claim 1 of Smith to support the proposition that the pressure sensor in Smith includes a temperature sensor. However, Smith refers only to the sensor's ability to compensate for temperature changes by using sensing fiber leg (44) and reference fiber leg (46) (See Claim 1 and Col. 2, lines 42-55). The sensing leg and the reference leg have the same length and would expand or contract at the same rate in response to temperature changes to minimize measurement error due to temperature changes.

Furthermore, Smith clearly states that "[t]his invention relates ... in particular to an optic fiber pressure transducer having reference and sensing legs and a temperature compensating device for compensating for temperature changes." (Col. 1, lines 7-11). Moreover, the Smith sensor when tested in an oven heated to selected temperatures would read the same pressure, because "the thermally induced pressure changes can be nullified." (Col. 3, lines 55-64).

Hence, claim 1 is patentable over the Smith reference and other references of record. Claims 2, 4-6, 8-10 and 22 depend directly or indirectly on claim 1 and cited further limitations therefrom. Therefore, claims 2, 4-6, 8-10 and 22 are also presently patentable. Applicants reverse the right to support their patentability independently should that becomes necessary.

Allowable claims 3, 7, 18-19 and 23-26 depend directly or indirectly on allowable claim 1. Hence, it is not necessary at this time to rewrite these claims in independent form.

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Independent claim 16, as amended, recites that the first pressure sensor is connected to a first launch fiber and the second pressure sensor is connected to a second launch fiber. Support for this amendment can be found in Figures 7, 8D and corresponding text. The Fernald reference discloses in Figure 6 two Bragg grating pressure sensors being connected to the same fiber. Hence, claim 16 as amended is patentable over the Fernald reference. Claim 17, as amended, depends on claim 16 and recites further limitations therefrom. Hence claim 17 is also patentable.

Applicants believe that \$120.00 for a one-month extension of time for the submission. If any additional fee is due, the Commissioner may charge appropriate fees or credit any overpayments to H.T. Than Law Group, Deposit Account No. 50-1980.

Respectfully submitted,

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